Cutaneous manifestations in COVID-19: a new contribution

Editor

We have read with great interest Dr Recalcati's review about skin manifestations in COVID-19 as it is the first report on this subject.[1] In a recent review on clinical characteristics of coronavirus disease 2019 in China, rash was observed in 0.2% of cases.[2] However, from the trained eyes of a dermatologist, this percentage may be higher.

Spain is now the fourth most infected nation in the world with 78.797 confirmed COVID-19 cases and 6.528 deaths at the moment. As in Italy, there is a lack of medical doctors and dermatologists are involved in triage stations and in the medical wards, especially in Madrid.

Cutaneous manifestations, such as erythematous rash, localized or widespread urticaria, seem to be the most common manifestations in acute severe cases; however, it can be difficult to distinguish the underlying cause (viral infection vs new medication prescribed). A skin rash with petechiae has also been

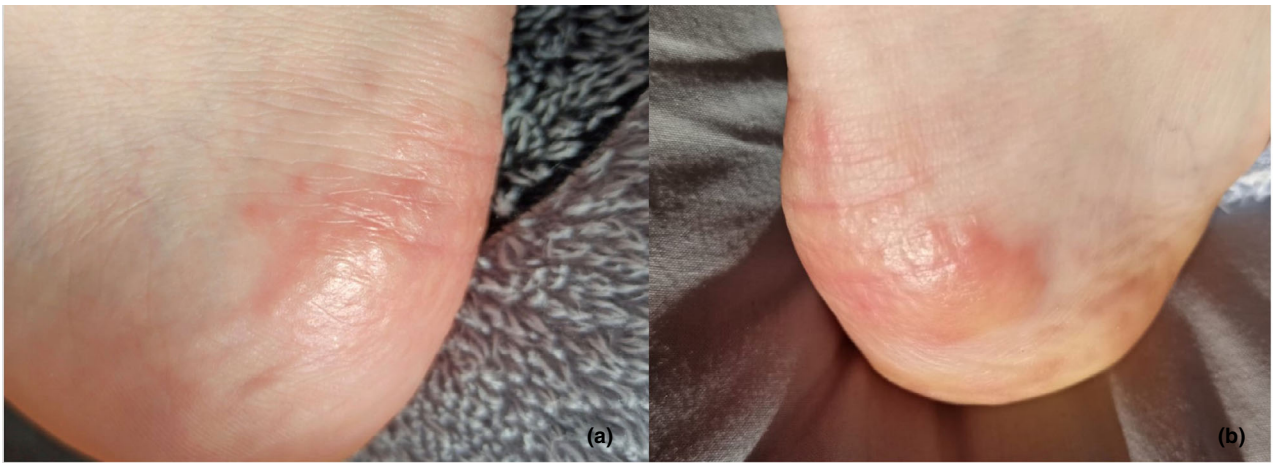

Figure 1 Confluent erythematous-yellowish papules in right (a) and left heel (b).

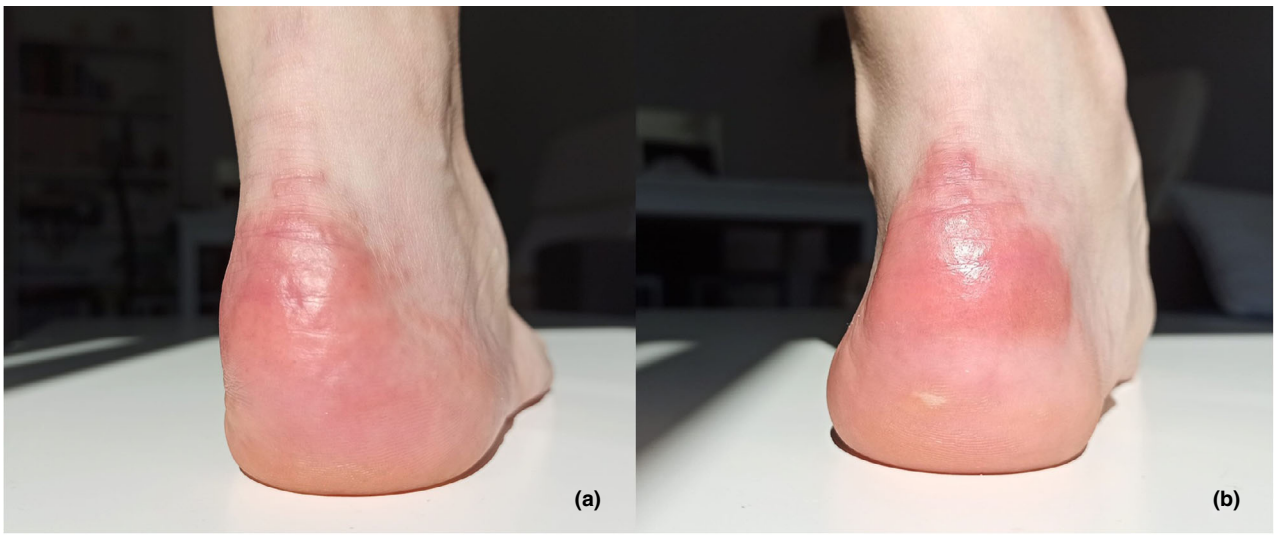

Figure 2 Intensely pruritic erythematous hardened plaques in right (a) and left heel (b) three days later despite topical corticosteroids.

described as a possible initial presentation of COVID-19 disease,[3] as well as acute haemorrhagic oedema of infancy associated with coronavirus NL63.[4]

We want to report one case of COVID-19 infection that presented with skin manifestations.

A 28-year-old woman with no previous medical history, initially presented with dry cough, nasal congestion, fatigue, myalgias and arthralgias without fever. She tested positive for coronavirus. As she was feeling well, self-isolation at home was recommended. Four days later, she presented with diarrhoea, ageusia and anosmia. During the following days, she started feeling better but with persistent dry cough, ageusia and anosmia. She only took paracetamol for the first 4 days and did not take any other drugs. Thirteen days after being tested (10 days after last dose of paracetamol), the patient started noticing pruritic lesions on both heels and sent us some photographs. Confluent erythematous-yellowish papules were observed in both heels (Fig. 1a-b), without any lesions on the rest of the skin. She denied wearing tight socks, shoes or any local pressure that could explain the distribution of the lesions. A treatment with local corticosteroids was advised. Despite this treatment, three days later, the lesions persisted and became erythematous plaques that were both hardened and pruritic (Fig. 2a-b). At this point, urticaria, urticarial vasculitis, idiopathic plantar hidradenitis and neutrophilic dermatosis were considered within the differential diagnosis. However, a biopsy was not performed.

Differing from Dr Recalcati´s report,[1] the lesions we describe do not look like morbilliform rash, urticaria or chickenpox-like vesicles; they respect the trunk and are intensely pruritic. The case we report is a mild COVID-19 disease case with no history of drug intake for the last 10 days. The observed skin manifestations could be related with the COVID-19 viral infection or with the immune response. We think it is important to report cutaneous manifestations of this new infection that may help us to pay attention, better diagnose and understand the disease.

Acknowledgements

The patients in this manuscript have given written informed consent to the publication of their case details.

A. Estébanez,[1,*] L. Pérez-Santiago,[2] E. Silva,[1] S. Guillen-Climent,[1] A. García- Vázquez,[1] M.D. Ramón[1]

[1]Department of Dermatology, Clinical University Hospital, University of Valencia, Valencia, Spain, [2]Department of Surgery, Clinical University Hospital, University of Valencia, Valencia, Spain

*Correspondence: Andrea Estébanez. Email: andreaestebanez_7@hotmail.com

References

1 Recalcati S. Cutaneous manifestations in COVID-19: a first perspective. *J Eur Acad Dermatol Venereol* 2020 Mar 26. https://doi.org/10.1111/jdv.16387. [Epub ahead of print].

2 Guan W, Ni Z, Hu Yu *et al*. Clinical characteristics of coronavirus disease 2019 in China. *NEJM* 2020 Feb 28. https://doi.org/10.1056/NEJMoa2002032. [Epub ahead of print].

3 Joob B, Wiwanitkit V. COVID-19 can present with a rash and be mistaken for Dengue. *J Am Acad Dermatol* 2020; **82**: e177. https://doi.org/10.1016/j.jaad.2020.03.036. [Epub ahead of print].

4 Chesser H, Chambliss JM, Zwemer E. Acute hemorrhagic edema of infancy after coronavirus infection with recurrent rash. *Case Rep Pediatr* 2017; **2017**: 1–3. https://doi.org/10.1155/2017/5637503.

DOI: 10.1111/jdv.16474

Viral exanthem in COVID-19, a clinical enigma with biological significance

Editor

Since December 2019, the COVID-19[1] has spread throughout the world at a staggering speed. As of 30 March 2020, the confirmed case number has reached 693 224 globally and the COVID-19 has claimed 33 106 lives.[2] Current researches emphasize on understanding of transmission patterns, severity, clinical features and risk factors for infection, but the data remain limited.

Common clinical features of COVID-19 reported include fever, cough, myalgia, fatigue, headache and diarrhoea.[3] It is not uncommon for viral infections to cause skin rashes, for example, measles, rubella and dengue fever all cause viral exanthems. However, the prevalence and pattern of cutaneous involvement with COVID-19 are unknown. Guan *et al*.[4] described 2 (0.2%) patients developed skin rash in the 1099 patients enrolled. However, the study did not describe the detailed skin manifestation, cutaneous symptoms, timing of the symptom onset or their criteria to diagnose the skin lesions and enrolment into the dataset. Since viral exanthem is not uncommon in viral infections, we were curious about skin manifestations in COVID-19. Meanwhile, we are keen to explore if there is a distinctive cutaneous feature that can help us differentiate coronavirus disease (COVID-19) from other viral infections.[5]

In Italy, COVID-19 has claimed over ten thousand lives, including more than 60 doctors. We honour the efforts of the physicians, nurses and healthcare workers in fighting this pandemic in Italy. In their busy clinical schedules, Recalcati *et al*.[6] in Italy elegantly reported the first large analysis on the skin manifestations of 148 COVID-19 positive patients in Lecco Hospital. After excluding 60 patients who recently had new drug intake, the authors unveiled a range of cutaneous manifestations including erythematous rash, widespread urticaria and chickenpox-like vesicles in 20.4% of all the remaining patients. The report brought up a couple of questions that we would like to

